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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,583	10/23/2000	Mathieu Vandenbossche	1200-370	2518

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EXAMINER

PEREZ, GUILLERMO

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

P.S.

<b>Office Action Summary</b>	<b>Application No.</b> 09/583,583	<b>Applicant(s)</b> VANDENBOSSCHE, MATHIEU	
	<b>Examiner</b> Guillermo Perez	<b>Art Unit</b> 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
    If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
        1. ☐ Certified copies of the priority documents have been received.  
        2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
    \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
    a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Oath/Declaration***

The application does not contain a Declaration for a Patent.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
  - 1. Field of the Invention.

2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
  - (g) Brief Description of the Several Views of the Drawing(s).
  - (h) Detailed Description of the Invention.
  - (i) Claim or Claims (commencing on a separate sheet).
  - (j) Abstract of the Disclosure (commencing on a separate sheet).
  - (k) Drawings.
  - (l) Sequence Listing (see 37 CFR 1.821-1.825).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the heat dissipation means" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the base" in line 13. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 4, 6-7, 9, and 11-13 are rejected under 35

U.S.C. 102(b) as being anticipated by Jacob et al. (U. S. Pat.  
5,675,205).

Referring to claim 1, Jacob et al. disclose a brush holder for a vehicle  
electrical machine, having:

an insulating support (15);

a metallic seat (14) fixed to the support (15) and

an electrical circuit (11, 23) comprising:

a semiconductor control component (11), in which the seat (14) on the one  
hand receives for fixing on one of its faces the control component (11) by means  
of an opening (22) in the support (15) and on the other hand belongs to heat  
dissipation means (9,14) in contact with the ambient environment and arranged  
so as to receive heat from the control component (11), characterized in that the  
seat (14) receives on the other one of its faces a heat dissipator (9 and column 5,  
lines 1-4) so that the heat dissipation means (9,14) is composed of two distinct  
and adjacent parts.

Referring to claim 2, Jacob et al. disclose that the seat (14) and the  
support (15) have different coefficients of expansion (column 2, line 61 through  
column 3, line 4).

Referring to claim 6, Jacob et al. disclose that the dissipator (9) is  
attached to the support (15).

Referring to claim 7, Jacob et al. disclose that the dissipator (9) is fixed to  
the support (15) by screws (8).

Referring to claim 9, Jacob et al. disclose that the seat (14) and the dissipator (9) are in direct contact (figure 2).

Referring to claim 11, Jacob et al. disclose that the dissipator (9) is metallic (column 2, lines 61-64).

Referring to claim 12, Jacob et al. disclose that that it comprises a brush holder according to Claim 1.

Referring to claim 13, Jacob et al. discloses that the or at least one of the screws (8) for mounting the dissipator (9) on the support (15) providing the fixing of the brush holder to a housing (9) of the machine.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. in view of Jaeschke (U. S. Pat. 4,469,968).

Jacob et al. disclose a brush holder as described on item 1 above. However, Jacob et al. do not disclose that the dissipator has a coefficient of expansion greater than that of the seat. Jacob et al. do not disclose that the support is molded onto the dissipator. Jacob et al. do not disclose that at least one from amongst the seat and dissipator has projecting reliefs able to enter the

material of the other one from amongst the base and dissipator when they are placed in the operating position of the brush holder.

Jaeschke discloses that the dissipator (71) has a coefficient of expansion greater than that of the seat (25 and column 5, lines 17-22). Jaeschke discloses that at least one from amongst the seat (25) and dissipator (71) has projecting reliefs (77) able to enter the material of the other one from amongst a base and dissipator (71) when they are placed in the operating position of the brush holder. Jaeschke's invention has the purpose of providing an efficient heat conductive path for the heat from one area to another of the embodiment.

It would have been obvious at the time the invention was made to modify the brush holder of Jacob et al. and provide it with the coefficient of expansion differences and the projecting reliefs disclosed by Jaeschke for the purpose of providing an efficient heat conductive path for the heat from one area to another of the embodiment.

Referring to claims 4-5, no patentable weight has been given to the method of manufacturing limitations (i. e. molded on) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. in view of Kato (U. S. Pat. 5,536,972).

Jacob et al. disclose a brush holder as described on item 1 above.

However, Jacob et al. do not disclose that it comprises a heat-conducting layer interposed between the seat and the dissipator.

Kato discloses that it comprises a heat-conducting layer (30d) interposed between the seat (30) and the dissipator (10). Kato's invention has the purpose of ensuring good heat conductivity between the aluminum plate and the heat radiating container.

It would have been obvious at the time the invention was made to modify the brush holder of Jacob et al. and provide it with the heat-conducting layer disclosed by Kato for the purpose of ensuring good heat conductivity between the aluminum plate and the heat radiating container.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. in view of Nakata et al. (U. S. Pat. 4,990,811).

Jacob et al. disclose a brush holder as described on item 1 above.

However, Jacob et al. do not disclose that a thermally insulating element is interposed between the or each screw and the dissipator.

Nakata et al. disclose that a thermally insulating element (36) is interposed between the or each screw (34) and the dissipator (18). The invention of Nakata et al. has the purpose of securing an insulator plate to a bracket through fixing legs.



It would have been obvious at the time the invention was made to modify the brush holder of Jacob et al. and provide it with the thermally insulating element disclosed by Nakata et al. for the purpose of securing an insulator plate to a bracket through fixing legs.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez  
November 17, 2001

  
NESTOR RAMIREZ  
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